RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _____ 10/642,284 B _____
Source: _____ IFW16 _____
Date Processed by STIC: _____ 11/16/2006 _____

ENTERED

IFW16

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RAW SEQUENCE LISTING                    DATE: 11/16/2006
PATENT APPLICATION:  US/10/642,284B     TIME: 11:43:30

Input Set : A:\2006-11-13 4600-0106P.ST251.txt
Output Set: N:\CRF4\11162006\J642284B.raw

 3 <110> APPLICANT: KUMAGAI, Izumi et al.
 5 <120> TITLE OF INVENTION: NOVEL DIABODY-TYPE BISPECIFIC ANTIBODY
 7 <130> FILE REFERENCE: 4600-0106P
 9 <140> CURRENT APPLICATION NUMBER: US 10/642,284B
10 <141> CURRENT FILING DATE: 2003-08-18
12 <150> PRIOR APPLICATION NUMBER: JP 2003-038643
13 <151> PRIOR FILING DATE: 2003-02-17
15 <160> NUMBER OF SEQ ID NOS: 46
17 <170> SOFTWARE: PatentIn version 3.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 33
21 <212> TYPE: DNA
22 <213> ORGANISM: Artificial Sequence
24 <220> FEATURE:
25 <223> OTHER INFORMATION: A NcoI-5H back primer
27 <220> FEATURE:
28 <221> NAME/KEY: misc_feature
29 <222> LOCATION: (1)..(3)
30 <223> OTHER INFORMATION: n is a, c, g, or t
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36 <210> SEQ ID NO: 2
37 <211> LENGTH: 28
38 <212> TYPE: DNA
39 <213> ORGANISM: Artificial Sequence
41 <220> FEATURE:
42 <223> OTHER INFORMATION: B 5H-EagI forward primer
44 <220> FEATURE:
45 <221> NAME/KEY: misc_feature
46 <222> LOCATION: (1)..(3)
47 <223> OTHER INFORMATION: n is a, c, g, or t
49 <400> SEQUENCE: 2
W--> 50 nnncggccga ggagactgtg agagtggt           28
53 <210> SEQ ID NO: 3
54 <211> LENGTH: 26
55 <212> TYPE: DNA
56 <213> ORGANISM: Artificial Sequence
58 <220> FEATURE:
59 <223> OTHER INFORMATION: C EcoRV-5L back primer
61 <220> FEATURE:
62 <221> NAME/KEY: misc_feature
63 <222> LOCATION: (1)..(3)
64 <223> OTHER INFORMATION: n is a, c, g, or t
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 66 <400> SEQUENCE: 3
W--> 67 nnngatatcc taatgaccca atctcc           26
 70 <210> SEQ ID NO: 4
 71 <211> LENGTH: 29
 72 <212> TYPE: DNA
 73 <213> ORGANISM: Artificial Sequence
 75 <220> FEATURE:
 76 <223> OTHER INFORMATION: D 5L-SacII forward primer
 78 <220> FEATURE:
 79 <221> NAME/KEY: misc_feature
 80 <222> LOCATION: (1)..(3)
 81 <223> OTHER INFORMATION: n is a, c, g, or t
 83 <400> SEQUENCE: 4
W--> 84 nnnccgcggc acgtttgatt tccagcttg       29
 87 <210> SEQ ID NO: 5
 88 <211> LENGTH: 32
 89 <212> TYPE: DNA
 90 <213> ORGANISM: Artificial Sequence
 92 <220> FEATURE:
 93 <223> OTHER INFORMATION: E NcoI-h5H back primer
 95 <220> FEATURE:
 96 <221> NAME/KEY: misc_feature
 97 <222> LOCATION: (1)..(3)
 98 <223> OTHER INFORMATION: n is a, c, g, or t
100 <400> SEQUENCE: 5
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104 <210> SEQ ID NO: 6
105 <211> LENGTH: 29
106 <212> TYPE: DNA
107 <213> ORGANISM: Artificial Sequence
109 <220> FEATURE:
110 <223> OTHER INFORMATION: F h5H-EagI forward primer
112 <220> FEATURE:
113 <221> NAME/KEY: misc_feature
114 <222> LOCATION: (1)..(3)
115 <223> OTHER INFORMATION: n is a, c, g, or t
117 <400> SEQUENCE: 6
W--> 118 nnncggccga gctcacggta accagcgta       29
121 <210> SEQ ID NO: 7
122 <211> LENGTH: 23
123 <212> TYPE: DNA
124 <213> ORGANISM: Artificial Sequence
126 <220> FEATURE:
127 <223> OTHER INFORMATION: G EcoRV-hOL back primer
129 <220> FEATURE:
130 <221> NAME/KEY: misc_feature
131 <222> LOCATION: (1)..(3)
132 <223> OTHER INFORMATION: n is a, c, g, or t
134 <400> SEQUENCE: 7
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                    RAW SEQUENCE LISTING              DATE: 11/16/2006
                    PATENT APPLICATION:  US/10/642,284B     TIME: 11:43:30

                    Input Set : A:\2006-11-13 4600-0106P.ST251.txt
                    Output Set: N:\CRF4\11162006\J642284B.raw

W--> 135  nnngatatcc agatgaccca gag                     23
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     139  <211> LENGTH: 23
     140  <212> TYPE: DNA
     141  <213> ORGANISM: Artificial Sequence
     143  <220> FEATURE:
     144  <223> OTHER INFORMATION: H hOL-SacII forward primer
     146  <220> FEATURE:
     147  <221> NAME/KEY: misc_feature
     148  <222> LOCATION: (1)..(3)
     149  <223> OTHER INFORMATION: n is a, c, g, or t
     151  <400> SEQUENCE: 8
W--> 152  nnnccgcggc gcgggtaatc tgc                     23
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     156  <211> LENGTH: 26
     157  <212> TYPE: DNA
     158  <213> ORGANISM: Artificial Sequence
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     161  <223> OTHER INFORMATION: I NcoI-hOH back primer
     163  <220> FEATURE:
     164  <221> NAME/KEY: misc_feature
     165  <222> LOCATION: (1)..(3)
     166  <223> OTHER INFORMATION: n is a, c, g, or t
     169  <400> SEQUENCE: 9
W--> 170  nnnccatggc ccaggtgcaa ctggtg                  26
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     174  <211> LENGTH: 23
     175  <212> TYPE: DNA
     176  <213> ORGANISM: Artificial Sequence
     178  <220> FEATURE:
     179  <223> OTHER INFORMATION: J hOH-EagI forward primer
     181  <220> FEATURE:
     182  <221> NAME/KEY: misc_feature
     183  <222> LOCATION: (1)..(3)
     184  <223> OTHER INFORMATION: n is a, c, g, or t
     186  <400> SEQUENCE: 10
W--> 187  nnncggccga gctaacggtc acc                     23
     190  <210> SEQ ID NO: 11
     191  <211> LENGTH: 26
     192  <212> TYPE: DNA
     193  <213> ORGANISM: Artificial Sequence
     195  <220> FEATURE:
     196  <223> OTHER INFORMATION: K EcoRV-h5L back primer
     198  <220> FEATURE:
     199  <221> NAME/KEY: misc_feature
     200  <222> LOCATION: (1)..(3)
     201  <223> OTHER INFORMATION: n is a, c, g, or t
     203  <400> SEQUENCE: 11
W--> 204  nnngatatcg tgatgaccca gagccc                  26
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Input Set : A:\2006-11-13 4600-0106P.ST251.txt
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209 <212> TYPE: DNA
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213 <223> OTHER INFORMATION: L h5L-SacII forward primer
215 <220> FEATURE:
216 <221> NAME/KEY: misc_feature
217 <222> LOCATION: (1)..(3)
218 <223> OTHER INFORMATION: n is a, c, g, or t
220 <400> SEQUENCE: 12
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W--> 221 nnnccgcggc gcgtttaatt tccactttgg tgccac 36
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224 <210> SEQ ID NO: 13
225 <211> LENGTH: 27
226 <212> TYPE: DNA
227 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Synthesized nucleotide M h5H-M48I(+)
232 <400> SEQUENCE: 13
233 gcctggaatg gattggtaac atttatc           27
236 <210> SEQ ID NO: 14
237 <211> LENGTH: 27
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: Synthesized nucleotide N h5H-M48I(-)
244 <400> SEQUENCE: 14
245 gataaatgtt accaatccat tccaggc           27
248 <210> SEQ ID NO: 15
249 <211> LENGTH: 21
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: Synthesized nucleotide O h5H-A93T(+)
256 <400> SEQUENCE: 15
257 tattactgca cgcgcagtgg c               21
260 <210> SEQ ID NO: 16
261 <211> LENGTH: 21
262 <212> TYPE: DNA
263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <223> OTHER INFORMATION: Synthesized nucleotide P h5H-A93T(-)
268 <400> SEQUENCE: 16
269 gccactgcgc gtgcagtaat a               21
272 <210> SEQ ID NO: 17
273 <211> LENGTH: 38
274 <212> TYPE: DNA
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
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278 <223> OTHER INFORMATION: Synthesized nucleotide Q h5H-R66KR71V(+)
280 <400> SEQUENCE: 17
281 atttaagaac aaagtgacca tgacggttga taccagca   38
284 <210> SEQ ID NO: 18
285 <211> LENGTH: 38
286 <212> TYPE: DNA
287 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:
290 <223> OTHER INFORMATION: Synthesized nucleotide R h5H-R66KR71V(-)
292 <400> SEQUENCE: 18
293 tgctggtatc aaccgtcatg gtcactttgt tcttaaat   38
296 <210> SEQ ID NO: 19
297 <211> LENGTH: 21
298 <212> TYPE: DNA
299 <213> ORGANISM: Artificial Sequence
301 <220> FEATURE:
302 <223> OTHER INFORMATION: Synthesized nucleotide S h5H-Y27D(+)
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305 gcctcaggcg ataccttac g   21
308 <210> SEQ ID NO: 20
309 <211> LENGTH: 21
310 <212> TYPE: DNA
311 <213> ORGANISM: Artificial Sequence
313 <220> FEATURE:
314 <223> OTHER INFORMATION: Synthesized nucleotide T h5H-Y27D(-)
316 <400> SEQUENCE: 20
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320 <210> SEQ ID NO: 21
321 <211> LENGTH: 35
322 <212> TYPE: DNA
323 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
326 <223> OTHER INFORMATION: Synthesized nucleotide U h5H-M69LT73R(+)
328 <400> SEQUENCE: 21
329 caaagtgacc ctgacggttg atcgcagcat ttcga   35
332 <210> SEQ ID NO: 22
333 <211> LENGTH: 35
334 <212> TYPE: DNA
335 <213> ORGANISM: Artificial Sequence
337 <220> FEATURE:
338 <223> OTHER INFORMATION: Synthesized nucleotide V h5H-M69LT73R(-)
340 <400> SEQUENCE: 22
341 tcgaaatgct gcgatcaacc gtcagggtca ctttg   35
344 <210> SEQ ID NO: 23
345 <211> LENGTH: 30
346 <212> TYPE: DNA
347 <213> ORGANISM: Artificial Sequence
349 <220> FEATURE:
350 <223> OTHER INFORMATION: Synthesized nucleotide W h5H-I75SS76RA78V(+)

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 11/16/2006
PATENT APPLICATION: US/10/642,284B   TIME: 11:43:31

Input Set : **A:\2006-11-13 4600-0106P.ST251.txt**
Output Set: **N:\CRF4\11162006\J642284B.raw**

<u>Please Note:</u>
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 1,2,3
Seq#:2; N Pos. 1,2,3
Seq#:3; N Pos. 1,2,3
Seq#:4; N Pos. 1,2,3
Seq#:5; N Pos. 1,2,3
Seq#:6; N Pos. 1,2,3
Seq#:7; N Pos. 1,2,3
Seq#:8; N Pos. 1,2,3
Seq#:9; N Pos. 1,2,3
Seq#:10; N Pos. 1,2,3
Seq#:11; N Pos. 1,2,3
Seq#:12; N Pos. 1,2,3

VERIFICATION SUMMARY   DATE: 11/16/2006
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Input Set : A:\2006-11-13 4600-0106P.ST251.txt
Output Set: N:\CRF4\11162006\J642284B.raw

```
L:33 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:67 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:187 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
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